

REMARKS/ARGUMENTS

The Office Action of March 10, 2005, has been carefully reviewed and this response addresses the Examiner's concerns stated in the Office Action. All objections and rejections are respectfully traversed.

Claims 1-20 are still pending in the application.

Applicants have attached a copy of an Information Disclosure Statement filed on January 30, 2002. Applicants records do not indicate that these references have been reviewed by Examiner.

Summary of telephonic interview with Examiners Coffy and Najjar

Applicants wish to thank Examiners Coffy and Najjar for the telephonic interview granted to Jacob N. Erlich and Kathleen Chapman on May 6, 2005. Applicants very much appreciate the time the Examiners spent reviewing and discussing the reasons presented by Applicants to find the claims of the above-mentioned application in condition for allowance. Applicants herein submit the arguments presented during the telephonic interview which are believed to place the above-mentioned application in condition for immediate allowance. Applicants respectfully request favorable consideration of the above-mentioned application.

Response to Office Action

The Office Action states, on page 3, in paragraph 4, that claims 1-20 are finally rejected as being unpatentable over Boyle et al., U.S. Patent 6,119,167, (Boyle), the primary reference, and Bouvier et al., U.S. Patent 5,961,594 (Bouvier), the secondary reference.

The Office Action states, on page 2, in paragraph 2, that Applicants must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited.

Applicants respectfully point out that neither Boyle nor Bouvier either individually or in combination teach or disclose the following:

(1) response instructions configured to direct the processor to search the response for a secure address and if the response includes the secure address then replace the secure address with a non-secure address and identifying characters; and

(2) request instructions configured to direct the processor to record the second request as a new page if the second request is for a new page and to replace the non-secure address and the identifying characters with the secure address if the second request is for the non-secure address and the identifying characters.

A detailed analysis is provided below as the response to the rejections of the Office Action.

The Office Action states, on page 2, in paragraph 3, that Applicants cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references.

Applicants respectfully point out that a criterion for establishing *prima facie* case of obviousness is that the references must teach or suggest all the claim limitations of Applicants' claimed invention. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicants respectfully point out that neither Boyle nor Bouvier teaches or suggests replacing a secure address with a non-secure address. In addition, Boyle teaches away from recording the second request as a new page if the second request is for a new page. Boyle teaches deleting data that are pushed, as opposed to recording data.

The Office Action states, on page 3, in paragraph 4, that the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art.

Applicants assert that if the teachings and disclosures from the Office Action from Boyle and Bouvier were combined, the resulting system would perform the following functions that would lead away from the patentable limitations of the present claimed invention:

- a. push and pull techniques such that a server is programmed to push data to a data destination;
- b. push and pull techniques such that a server is programmed to send a command to delete the data under predetermined conditions;

- c. a browser proxy that can send multiple requests for the same or different users over a single TCP connection;
- d. the browser proxy can send IP secure and non-secure addresses and other characters;
- e. the browser can send HTTP messages to the server including a first request and a second request in the form of a command.

Applicants further assert that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

In the combination of Boyle and Bouvier, there is no teaching, suggestion, or motivation found either explicitly or implicitly or in the knowledge generally available to one of ordinary skill in the art to create a software product to record a transaction for a user operating a web browser wherein the transaction is used for automated testing of an Internet server system, and wherein the instructions to create the transaction replace secure addresses with non-secure addresses, and record requests.

Claim Rejections - 35 USC § 103

The Office Action states, on pages 3-5 and 9, in paragraph 4, that claims 1 and 11 are rejected based on the following teachings of Boyle and Bouvier.

- a. Boyle col. 2, line 67
“The present invention provides push and pull techniques that reduce the use of network resources and make it faster for the client to access data from the server.”
- b. Boyle col. 6, lines 51-52
“In some embodiments, browser proxy 150 sends multiple requests for the same or different users over a single TCP connection.”
- c. Boyle Table A2.5
The data structure of a Session Reply, which is a server response to a session request. The reply contains security violation count, session ID, cipher confirmation, a response to a challenge to satisfy authentication, server challenge to the client for authentication, boot info length, key length, number of dispatcher IP addresses, session key, bootstrap info, and array of IP addresses for dispatchers.
- d. Bouvier col. 8, lines 36-55

“First, the web browser 300 sends an HTTP message to the web server 301. The message is generated by a human operator clicking on a hyperlink of a web browser page with a mouse as explained previously. The message is received by the "HTTP Daemon" 302 part of the web server which is in charge of the exchange of the HTTP messages between the web server and the web browser. This message triggers a NMAP software program 305 thanks to the CGI interface 303 according to a mechanism which is well known by a person skilled in the art. This first request could be to get a screen menu. Such screen menu is dynamically built in the web server 301 by the software program responsible for that task 305 using HTML tags and forms. The requested screen menu is returned to the web browser 300 using the reverse path. A more detailed explanation of the NMAP structure will be given later on. By clicking on the proper field on the received menu, the user at the web browser 300 is able to send a second command to the web server 301 for performing an action on a particular network node called "destination node". Such an action could be for instance:”

The Office Action states that Boyle teaches push and pull techniques such that a server is programmed to push data to a data destination and to send a command to delete the data under predetermined conditions. The Office Action further states that Boyle teaches a browser proxy that can send multiple requests for the same or different users over a single TCP connection (col. 2, line 67, and col. 6 lines 51-52), and that the data include IP secure and non-secure addresses and other characters (Table A-5).

Contrary thereto, Applicants respectfully point out that, while Boyle does teach a special command to delete data that has been pushed to an intermediate processor, Boyle does not teach replacing a secure address with a non-secure address as claimed by Applicants. And while Boyle does teach sending multiple requests for the same or different users, Boyle does not teach or suggest a processor that records a second request as a new page as claimed by Applicants.

The Office Action states that Boyle fails to teach about a web browser sending HTTP messages to the web server including a first request and a second request in the form of a command. The Office Action states that Bouvier teaches this concept (col. 8, lines 36-55).

Applicants respectfully point out that whether or not Bouvier teaches this concept, Applicants' invention does not. The Office Action states that Bouvier teaches

communication between a web browser and a web server. Applicants, on the contrary, claim communication between a web browser and the Internet. The Office Action states that Bouvier teaches a web browser sending HTTP messages to a web server including a first request and a second request in the form of a command. Applicants, on the contrary, claim communication requests that are exchanged between a web browser and the Internet.

- Applicants do not find in Boyle, Bouvier, or their combination, either
- (a) Instructions to replace a secure address with a non-secure address, or
 - (b) Instructions to record a request.

There is no motivation to combine a reference that teaches pushing data to an intermediate processor and then deleting that data with a reference that teaches remote access and monitoring of network nodes. Further, the stated motivation for combining the references is not related to the problem being solved by the present invention which is creating transactions to test and monitor an Internet server system.

Since Boyle and Bouvier, separately or in combination, do not teach or suggest each and every element of Applicants' independent claims 1 and 11, either expressly or inherently, Applicants' claims 1 and 11 (as well as claims 2-10 and 12-20 that depend on allowable claims 1 and 11 and that further define the invention) are not made obvious by Boyle and Bouvier, and a rejection under 35 U.S.C. § 103(a) is inappropriate. Applicants assert that claims 1 and 11 (as well as claims 2-10 and 12-20 that depend therefrom) are now in condition for allowance. Applicants respectfully request the withdrawal of rejections under 35 U.S.C. § 103(a) with regards to claims 1-20 for the reasons set forth above.

Further remarks with regard to the patentable distinctions of Applicants' claimed invention in claims 2-10 and 12-20 over Boyle and Bouvier follow.

The Office Action states, on pages 5 and 9, with respect to dependent claims 2 and 12, which depend from independent claims 1 and 11, that Boyle teaches about a unique identifier such as a hyperlink (col.7, lines 45-48), and that a hyperlink could be an embedded object in a file or document. The Office Action states that Bouvier discloses that when the response is received, the command builder analyzes it, prepares an HTML page with the response formatted in a convenient way for a human user to interpret it

easily. Applicants respectfully point out that neither Boyle nor Bouvier provide such a teaching.

Applicants respectfully point out that the hyperlink of Boyle is an identifier in cache memory of the browser used to determine if the browser data are old or have been superseded. Applicants further point out that Boyle teaches network data sources that communicate with each other via an intermediate computer system. The function of the intermediate computer system is to automatically or on command delete data that has not been delivered in order to conserve system resources. Bouvier teaches a specialized web server that transmits and receives to a particular piece of software in a web node through a specific protocol. The software in the web node translates information coming from the web server into a format that applications in the web node can understand.

The combination of Boyle and Bouvier do not teach or suggest adding embedded objects to a list, nor recording a request from a web browser as a new page if the request is not for any objects already on the list. Boyle teaches away from adding embedded objects to a list because in Boyle, if cache 122 contains an earlier version of the data (for example, a previous header list), the earlier version is deleted (col. 7, lines 34-36).

The Office Action states, on pages 6 and 9, with respect to dependent claims 3 and 13, which depend on dependent claims 2 and 12, which depend on independent claims 1 and 11, that Boyle teaches a method wherein the processor (server) is programmed to clear (delete) a notification if some condition is met (col. 10, lines 47-50 and col. 7, lines 33-36).

Applicants respectfully point out that Boyle teaches the sending of notifications to a messenger when mail service 132 receives a new message. Browser 134 caches the data contained in the notifications and deletes an earlier version of the data if cache 122 contains the earlier version of the data (col. 6, line 66 – col. 7, line 36).

Thus, Boyle teaches away from Applicants' claim 3, because whereas Boyle deletes data when earlier versions of those data *are* found, Applicants delete objects when requested objects *are not* found on the list.

The Office Action states, on pages 6 and 9, with respect to dependent claims 4 and 14, which depend from independent claims 1 and 11, that Boyle extensively teaches a method to record the URL of a request (col. 11, lines 39-42, and col. 12, lines 51-52).

Applicants respectfully point out that Boyle copies a URL as an intermediate step to support other processing of both push and pull operations. There is no need or use specified for the URL after the push or pull operation is complete. Applicants, on the contrary, claim a software product to record a transaction that includes instructions to direct a processor to record URLs for first and second requests. The steps in the transaction are recorded through the recordation of the URLs.

The Office Action states, on pages 6-7 and 9, with respect to dependent claims 5 and 15, which depend from independent claims 1 and 11, that Boyle suggests a sequence number allowing the browser to determine which version of the data is more recent, and that Boyle discloses the use of the sequence number as assigned by the www service or by a link station (col. 7, line 66 through col. 8, line 12, and col. 13, lines 1-6, and col. 11, lines 9-33).

The Office Action correctly points out that the sequence number could be used to determine a more recent version of data so that the less recent version could be discarded. Boyle teaches away from Applicants' software product to record transactions in which instructions direct a processor to record a sequence of first and second requests because Boyle teaches discarding data, not recording it. The purpose of this recordation in Applicants' invention is to record a transaction. Boyle and Bouvier do not teach recording requests at all.

The Office Action states, on pages 7 and 9, with respect to claims 6 and 16, which depend from independent claims 1 and 11, that Boyle suggests a messenger time-to-live concept or elapsed time (col. 10, lines 33-39, and col. 8, lines 13-16), that Bouvier teaches a first request and a second request.

Applicants respectfully point out that, on page 11, lines 11-21, of the Specification, Applicants describe that test instructions 121 can direct processor 111 to record browser activity as a series of steps. As an example, one step of browser activity could be the

request for a web page. A next step could be entering information into the web page. These steps could be recorded by the system of the present invention as an operator is visiting the web site. For each step, the system of the present invention can maintain test measurements that are related to the steps of the transaction. One possible test measurement that can be recorded as a web site is visited and later reset to account for varying network conditions, for example, is elapsed time associated with the step of visiting the web site, for example.

Applicants respectfully point out that the time-to-live concept of Boyle refers to the amount of time data are allowed to remain in the cache before they are deleted. Neither Boyle nor Bouvier teach recording of elapsed time between first and second requests.

The Office Action states, on pages 7 and 9, with respect to claims 7 and 17, which depend from independent claims 1 and 11, that Boyle teaches about allowing user input, that Bouvier teaches a first request and a second request.

Applicants respectfully point out that the user input of Boyle is a request for a push or pull of data. Applicants assert that neither Boyle nor Bouvier teach a software product for recording a transaction that includes instructions for recording user input within the first and second requests. Applicants record user input as part of the recorded transaction in order to ensure a realistic testing situation.

The Office Action states, on pages 8 and 9, with respect to claims 8 and 18, which depend from independent claims 1 and 11, that Boyle discloses a stock quote transaction that is akin to a purchase (col. 7, lines 16-18).

Applicants respectfully point out that the transaction of Boyle is a live financial transaction, not a transaction, that can be a purchase, used for automated testing of an Internet server system. Further, neither Boyle nor Bouvier teach recording the transaction.

The Office Action states, on pages 8 and 9, with respect to claims 9 and 19, which depend from independent claims 1 and 11, that Boyle teaches about the data comprising secure and non-secure address and Uniform Resource Locators (Table A2.5), whereas

Bouvier teaches a first request, a second request, Hypertext Transfer Protocol requests and Hypertext Markup Language page (col. 8, lines 36-55, and col. 12, lines 45-49).

Applicants respectfully point out that Boyle teaches a session reply packet that includes security information such as security violation count limit, cipher confirmation, authentication handshaking, security key length, number of dispatcher Internet Protocol (IP) addresses in display list, bootstrap info (i.e. home page URL), and array of IP addresses for dispatchers. Applicants respectfully point out that Boyle does not teach a secure address and a non-secure address.

The Office Action states, on page 9, with respect to claims 10 and 20, which depend from independent claims 1 and 11, that Boyle suggests inserting an HTTP request header, which includes user identification (col. 6, lines 45-48), and that Boyle discloses breaking a header list into decks, whereas Bouvier discloses a first request, a second request.

Applicants respectfully point out that Boyle teaches creating push and pull requests, and providing them with headers as identification. Applicants, on the contrary, claim a software product to record a transaction that includes instructions to direct a processor to search a header of a response for a special instruction and to record the special instruction if it is found. Neither Boyle nor Bouvier nor their combination teaches recording a special instruction from a header of a response.

The Office Action further states that this system would measure the effectiveness of data base search. Applicants respectfully assert that the motivation of measuring the effectiveness of data base search does not produce the claimed invention of recording a transaction for automated testing of an Internet server system

The Office Action states, on page 9, with respect to independent claims 11-20, that these claims do not teach or define any significantly new limitation above and beyond claims 1-10 to warrant particular treatment, and that Claims 11-20 are rejected for similar reasons as claims 1-10. Applicants have therefore addressed the rejections of claims 11-20 in conjunction with claims 1-10 above.

In view of the absence from any cited reference of Applicants' claimed invention as set forth above, Applicants respectfully urge that Boyle and Bouvier, separately or in combination, are not sufficient to render the presently claimed invention obvious under 35 U.S.C. § 103.

Conclusion

Independent claims 1 and 11 are believed to be in condition for allowance. All dependent claims are believed to depend upon allowable independent claims, and are therefore also in condition for allowance. Applicants therefore respectfully request that the remarks presented herein be entered, the claims be allowed, and the application be passed to issue.

The Commissioner for Patents is authorized to charge additional fees or credit overpayment to Deposit Account No. 50-1078.

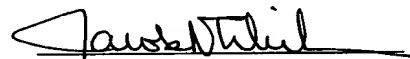
The following information is presented in the event that a call may be deemed desirable by the Examiner:

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Respectfully submitted,
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Date: May 10, 2005

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